



Circular Economy Policy Team  
Department of Environment, Land, Water and Planning  
PO Box 500  
East Melbourne VIC 8002

1 August 2019

## Port Phillip EcoCentre submission RE: A Circular Economy for Victorians

Dear Circular Economy Policy Team,

The Port Phillip EcoCentre ('the EcoCentre') is a leading community-managed organisation with a dedicated team of scientists, educators and 3000+ volunteers who design and implement innovative environmental programs. We connect communities to their ecosystems in over 160 Melbourne suburbs, and bring together people of all ages and backgrounds to spark solutions and inspire environmental leadership. Each year we collaborate with over 25 Affiliate organisations, 120 schools and 250 partners from business, government, philanthropy, education and research institutions.

We commend the Victorian Government commitment to a Circular Economy Policy with significant potential environmental, economic and health benefits. Please find below our responses in consideration of the *A circular economy for Victoria - Issues Paper* (July 2019).

### Q1. Is this a useful definition of a circular economy? How would you change it?

#### 1. Include a succinct, conversation-friendly definition.

The definition is useful for a policy paper, but not succinct enough for everyday conversations, school curriculum, media outlets and other forums that will be essential engagement for explaining and encouraging the shift to Victorians.

In a circular economy, nothing is wasted because the 'leftovers' from any process, job or product are repeatedly shared, repaired, or reshaped to produce something new. These repeated cycles and new links eliminate waste, reduce pressure on natural resources, and boost business growth through efficiency.

#### 2. Emphasise creating new links.

The Issues Paper definition is currently missing emphasis on creating critical new links needed *between users*, and *across industries*, in order to build these resource-reuse loops that connect previously separate entities. For example, ASPIRE<sup>1</sup> is a waste 'match-making' tool that includes business-to-business solutions for redirecting materials to other operators rather than landfill disposal. There is significant opportunity (and need) for public, private and community sectors to work together to develop new strategic connections for material flows and share/repair economies.

#### 3. Define **remanufacturing** to distinguish it from recycling.

Remanufacturing is not yet a familiar phrase to most Victorians. Remanufacturing, or restoring a product to functionality by replacing or repairing parts, is actually a higher priority

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<sup>1</sup> <https://www.kingston.vic.gov.au/Kingston-Business/Business-Support-and-News/Business-Networks/Sustainable-Business-Network/ASPIRE-Program>

than recycling, per the waste management hierarchy legislated by Victoria's *Environmental Protection Act 1970*. Clearly defining remanufacturing versus recycling will help governments respond appropriately to the Waste Management and Resource Recovery Association of Australia *5-Point Plan* calling for 'a strong remanufacturing sector'<sup>2</sup> which seemingly conflates the two processes. Remanufacturing should take priority over recycling.

## Q2. Do you think Victoria should pursue a more circular economy? Why or why not?

### 4. A circular economy is critical to minimising wastefulness and pollution.

The EcoCentre fully supports Victoria in the pursuit of a circular economy, to achieve efficiencies, encourage sharing and repairing, eliminate wastefulness and pollution, and stop overconsuming natural resources at a faster pace than the planet can re/generate them.

An ecological footprint<sup>3</sup> is an indicative estimate of the biological resources required to meet a population's consumption demands and absorb its carbon emissions. Our footprint and the planet's available natural resources are commonly expressed in *global hectares* (gha).

- Australians have a footprint 3x the global average resource consumption
- Victorians have a higher ecological footprint than the Australian average
- Victorians footprint is 4x beyond the world's capacity to provide/regenerate natural resources

### 5. Victorians need additional social encouragement and tools to reduce over-consumption.

A big life with a small footprint is possible. The technical aspects of implementing a Circular Economy must be complemented with helping shift social norms. Victoria and the world have growing movements modelling a rich life built on less material consumption – people transitioning to zero waste living, tiny homes, toy libraries, clothes swaps or Repair Cafes.

The human factors of participating a Circular Economy should not be underestimated. Victorians will need to be inspired to lead changes in their personal and professional lives.

## Q3. Are there other benefits of a circular economy that should be considered in developing the policy?

### 6. Australians can gain social co-benefits through a circular economy.

Australian social researcher Hugh Mackay observes that contemporary Australians are more socially fragmented than ever before and therefore we have an epidemic of anxiety.<sup>4</sup> There is possibility to achieve improved social connection, and therefore health benefits, through community-based share and repair elements of a circular economy.

### 7. It is both fair and opportune to reduce offshoring of and marine pollution by items treated as 'waste' materials in a linear economy.

The multi-decade practice of offshoring waste 'scrap' material, and any pollution its processing incurs, is ethically problematic. New options for clean, reuse-suitable materials and forms, alongside establishing remanufacturing and recycling facilities in Australia, can minimise 'leakage' of materials as pollutants; build an 'Australian Recycled' brand; and

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<sup>2</sup> WMRR'S FIVE-POINT ACTION PLAN, April 2019

<sup>3</sup> <http://data.footprintnetwork.org>

<sup>4</sup> Australia Reimagined – towards a more compassionate, less anxious society

reduce negative health impacts on the humans, waterways and air quality of countries currently or previously receiving our 'waste.'

#### **Q4. Which parts of the economy, which materials, or which activities should be a priority focus for Victoria's circular economy policy? Why?**

8. For system-focused changes, start with materials and activities that have a proportionally large footprint in terms of embodied water used, emissions generated, items that incur land use impacts/tree loss, or demonstrated likelihood of becoming pollutants. For user-focused changes, identify materials that have existing momentum in Victorian conversation therefore could achieve early buy-in.
- a. Plastics should be reduced and redesigned based on higher-level principles for safe, easy reusability either in its form or component parts. The concept of 'single-use' is contradictory to a circular economy, however plant-based plastics may prove suitable<sup>5</sup> where plastics have medical justification, etc.
    - i. prioritise reduction
    - ii. reuse what is durable (possible for around 20% of products)
    - iii. increase our plastic recycling rate to 55% of products (~5x increase)
    - iv. replace the source for products needing virgin plastics (25% of products) by using plant plastics with a carbon-negative design.

The reduction of and loop-closing on plastics will help, in turn, reduce enormous plastic pollution loads in aquatic ecosystems. The EcoCentre's research has demonstrated that the top 20cm (surface waters) of the Yarra and Maribyrnong Rivers carry nearly 1.4 billion items of litter to Port Phillip Bay each year. Over 1.1 billion items (79%) of this litter load is microplastics (pieces of plastic < 5 mm in diameter), with the largest category by volume being hard plastic fragments from other plastic products.<sup>6</sup>

Rather than implementing a product-by-product ban, potentially leaving bans open to exploitation, concentrate on designing an overarching framework that uses sustainable designs and materials and recovery plans as a criterion for all products. Actively fund and subsidise industry and start-up initiatives that move away from manufacturing plastics or try to replace them with truly sustainable alternatives.

- b. Construction and demolition incurs a wide range of industrial waste which cost Victorians over \$30m per year to clean up<sup>7</sup>. It relies on products like cement with dense emissions impacts when created/disposed. Construction sites can also be point sources for pollutants such as polystyrene beads (number two microplastic polluting the Yarra River), washing contaminants into stormwater drains, and wasteful disposal of off-cuts and 'spare' materials that were over-ordered. (We have heard anecdotes from tradies of multiple pallets of bricks or tiles at the end of a development, smashed to go to landfill because the client had already paid for that volume based on a quoted cost.) Provide certification to tradies, developers and estimators for waste-free development; and support options to rehome or buy back 'spare' materials remaining after construction.
- c. Food scraps comprises a large portion of Victorians' eco-footprint. Sustainability Victoria 'Love Food Hate Waste' campaigns focus on households, not farms,

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<sup>5</sup> <https://bze.org.au/wp-content/uploads/BZE-Electrifying-Plastic-Brief-2019-Beyond-Zero-Emissions-Australia.pdf>

<sup>6</sup> Clean Bay Blueprint, 2019. Funded by the Victorian Government Port Phillip Bay Fund.

<sup>7</sup> <https://www.epa.vic.gov.au/your-environment/waste/construction-and-demolition-waste>

shops or restaurants. 'Nose to tail' cooking and selling 'ugly fruit' are appealing contemporary frames for growing, cooking and selling without wastefulness. Commercial composting facilities must be available to support kerbside collection across Greater Melbourne. Community compost sites such as the EcoCentre's are oversubscribed. Following *War on Waste*, drop-offs to our volunteer-managed compost bays increased 5x and we now process 40 tonnes of food scraps per year, periodically closing the bays due to overwhelming input.

- d. Promote alternatives to fast fashion.
  - e. Collaborate with realtors, IKEA, op-shops, Gumtree, Councils, universities or other potential stakeholders for innovative ways that close the loop and prevent dumping of (often reusable) materials by renters in high-turnover medium and high-density dwellings.
9. Implement extended Product Stewardship schemes.
10. Create an Australian Recycled Content label with the Australian Government.
11. Legislate for the 'right to repair' and against 'planned obsolescence'.

#### **Q5. What issues will the government need to consider or manage in the shift to a circular economy?**

12. Identify and correct 'perverse incentives' that exist (eg usable 'spare' construction material going to waste) and consider any that might be inadvertently created.
13. Waste to Energy should never be used for mixed municipal solid waste.

Like many environmental groups worldwide, we harbour extreme concerns about Waste to Energy (WTE) schemes that use thermal processes to convert various 'feedstocks' into heat or electricity – appropriate only in niche, distributed scenarios. Our concerns regarding toxic emissions, inefficiency and economic costs of WTE can be read in our paper at [www.ecocentre.com/submissions](http://www.ecocentre.com/submissions). WTE processes rely on 'reliable waste volumes over long periods to justify investment, consequently locking up (and using only once) resources that could be repeatedly recycled in the circular economy.' (Boomerang Alliance, 2017)

#### **Q6. Would the shift to a circular economy adversely affect your industry? How could government mitigate these effects?**

14. As an environmental community centre, we understand a circular economy will provide significant environmental and economic benefits. However, it will be critical to be able to explain the concept simply and promote tangible solutions within and between industries. The Victorian Government should incentivise, invest in and reward successful collaborations to clarify and crystallise the possibilities.

#### **Q7. How do you think the Victorian Government should measure and report on progress toward a more circular economy?**

15. It is appropriate to measure recovery rate; recycled material as a share of the total material used in the Victorian economy (made here, imported, and exported); waste generation per person, and eco footprint (which accounts for the production cost as well as waste generated) in comparison to the world's biocapacity; and new jobs created in circular businesses. Where possible, report co-benefits such as social connections, health improvements or emissions reductions.

16. We do not support using 'energy generated from waste' as a metric as it can become a perverse incentive for inefficiencies, overconsumption, and diverting materials that should be otherwise reused according to the legislated waste hierarchy (see 13). Similarly we are concerned 'reduction in stockpiles of recyclable material' does not necessarily imply or incentivise appropriate, safe, efficient or ecologically beneficial methods to achieve that reduction. i.e. we would not consider dropping the stockpiles into the ocean, burying or burning them as good practice but it would score well on that suggested metric.

**Q8. What are the most effective actions the government can take to shift Victoria to a circular economy?**

17. Remember the human factors during this change.

Help form the links that turn lines into loops. Match-make between parties with leftover material and those needing feedstock.

Fund community leaders, NGOs, curriculum and local government 'sustainable business networks;' to create 'communities of practice' and spark conversations and collaborations. Provide grants that incentivise cross-sector work and community-led projects like Repair Cafés.

Consider innovative reframing of libraries into hubs for circular economy principles (beyond sharing books, toys and computers). Assuage local government concerns that risk library closure, by rejuvenating them with new creative 'circular' enterprises.

Convene advisory panel(s) representing different aspects of material life cycles to provide input on Policy directions. This policy should integrate *all* the portfolios of DELWP.

18. Guide Victoria toward a fair footprint.

Much of the four million tonnes sent to landfill in Victoria annually is avoidable by smarter design, making and buying quality goods, sharing and repairing.

19. Progressively move toward full requirement for all packaging to be fully reusable, recyclable, or safely compostable.

20. Provide both carrots and sticks.

For example, provide grants, certifications and awards; but also enforce the new definition of plastics as a pollutant in the State Environment Protection Policy (Waters), by fining factory sites leaking pre-production pellets, or brands whose products are commonly found littered.

On behalf of the Port Phillip EcoCentre and our members, thank you for the commitment to a Circular Economy Policy, and the opportunity to provide comments.

Sincerely,



April Seymore  
Executive Officer